

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.goy/pera/

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

R.C. Aluminum Industries, Inc. 2805 NW 75th Avenue Miami, FL 33122

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code. This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "SH 100" Aluminum Single Hung Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. **W04-19**, titled "SH100 Alum Single Hung Window (L.M.I.)", sheets 1 through 6 of 6, dated 03/09/04 with revision F dated 10/21/11, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA revises NOA # 10-0525.06 and consists of this page 1, Evidence pages E-1, E-2, E-3, and Green Sustainable Attributes page G-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Manuel Perez. P.E.**

MIAMI-DADE COUNTY
APPROVED

W

NOA No. 11-0922.07 Expiration Date: June 24, 2014 Approval Date: October 27, 2011 Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

- 1. Manufacturer's die drawings and sections.
- 2. Drawing No W04-19, titled "SH100 Alum Single Hung Window (L.M.I.)", sheets 1 through 6 of 6, dated 03/09/04 with revision F dated 10/21/11, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.

B. TESTS

- 1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411.3.2.1, and TAS 202-94

along with marked-up drawings and installation diagram of an aluminum single hung window, prepared by Fenestration Testing Laboratory, Inc., Test Report No.

FTL-6434, dated 06/24/11, signed and sealed by Marlin D. Brinson, P.E.

- 2. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 20294
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411.3.2.1 and TAS 202-94

along with marked-up drawings and installation diagram of aluminum single hung window, prepared by Fenestration Testing Laboratories, Inc. Test Report No.

FTL-5865 dated 05/14/09, signed and sealed by Michael R. Wenzel, P.E.

(Submitted under previous NOA #10-0525.06)

- 3. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 20294
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411.3.2.1 and TAS 202-94

along with marked-up drawings and installation diagram of aluminum single hung windows mulled together, prepared by Fenestration Testing Laboratories, Inc. Test Report No. **FTL-4024** dated 01/14/04, signed and sealed by Edmundo J. Largaespada, P.E. (Submitted under previous NOA #06-1130.04)

Carlos M. Utrefa, P.E. Product Control Examiner NOA No. 11-0922.07

R.C. Aluminum Industries, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS (CONTINUED)

- 4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 20294
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
 - 6) Forced Entry Test, per FBC 2411.3.2.1 and TAS 202-94

along with marked-up drawings and installation diagram of an aluminum single hung window, prepared by Fenestration Testing Laboratories, Inc. Test Report No. **FTL-4005** dated 01/14/04, signed and sealed by Edmundo J. Largaespada, P.E. (Submitted under previous NOA #06-1130.04)

C. CALCULATIONS

- 1. Anchor verification calculations and structural analysis, complying with FBC-2007 and FBC-2010, prepared by Al-Farooq Corporation, dated 07/05/11 and 10/20/11, signed and sealed by Javad Ahmad, P.E.
- 2. Glazing complies with ASTM E1300-04.

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

E. MATERIAL CERTIFICATIONS

- 1. Notice of Acceptance No. 10–0413.04 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Sentry Glass® Interlayer" dated 05/26/10, expiring on 01/14/12.
- 2. Notice of Acceptance No. 10-0922.09 issued to E.I. DuPont DeNemours & Co., Inc. for their "DuPont Butacite® PVB, Interlayer" dated 12/24/10, expiring on 12/11/11.

F. STATEMENTS

- 1. Statement letter of conformance with the FBC-2007 and FBC-2010, and no financial interest, dated October 20, 2011, signed and sealed by Javad Ahmad, P.E.
- 2. Proposal # 08-1635 issued by BCCO to R.C. Aluminum Industries, Inc., dated 11/24/08, signed by Renzo Narciso, Engineer 1, Product Control Division.

G. OTHER

1. Notice of Acceptance No. 10-0525.06, issued to R.C. Aluminum Industries, Inc. for their Series "SH 100" Aluminum Single Hung Window – L.M.I., approved on 09/01/10 and expiring on 06/24/14.

Manuel Perez, P.E. Product Control Examiner NOA No. 11-0922.07

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 2. Simulation Performance, Solar Heat Gain Coefficient, Visible Transmittance, & Condensation Resistance Calculation Report on:
 - 1) NFRC 100-2004 "Procedure for Determining Fenestration Product U-Factors"
 - 2) NFRC 200-2004 "Procedure for Determining Fenestration Product Solar Heat Gain Coefficient and Visible Transmittance at Normal Incidence"
 - 3) NFRC 500-2004 "Procedure for Determining Fenestration Product Condensation Resistance Values"

Using computer simulation in accordance with NFRC: Frame and Edge Modeling: THERM 5.x, / WINDOW 5.x NFRC Simulation Manual (Approved at test date), of a RC Aluminum Series "SH100" single hung aluminum window, along with attached drawings and bill of materials included in Appendix A, marked-up by National Certified Testing Laboratories, Test Report No. NCTL-110-12453.01, pages 1 through 6 of 6, dated 11/16/09, signed by Richard A. McVicker III, Simulator, and Steven H. Coble, NFRC Accredited Simulator, Simulator-In-Responsible-Charge.

- 3. NFRC 102-2004 Thermal Performance Test Report on:
 - 1) NFRC 102-2004 "Test Procedure for Measuring the Steady State Thermal Transmittance of Fenestration Systems"

Test report of a series "SH100" Tilt Single Hung Aluminum Prime Window with Low E and Argon, along with submittal component drawings, with applicable part numbers, manufacturing and modeling details included in Appendix A, marked-up by National Certified Testing Laboratories, Test Report No. **NCTL-110-12454-1**, pages 1 through 4 of 4, dated 12/02/09, signed by Christian J. Mitchell, Technician, and Robert H. Zeiders, P.E., Vice-President Engineering & Quality Person-In-Responsible Charge.

4. Recycled Content Determination Report on:

Name: Single Hung Window, SH100

Raw Material: Aluminum

Including letter from **Fundiciones Industriales S.A.** (**FISA**) dated March 22, 2010, certifying that the extruded aluminum products contained 30% recycled scrap material, signed by Henry Kronfle, Vice-President.

Manuel Ferez, P.E. Product Control Examiner NOA No. 11-0922.07

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

GREEN SUSTAINABLE ATTRIBUTES (GSA)

SCOPE: This document is solely for the purpose of verification of Sustainable Attributes of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division.

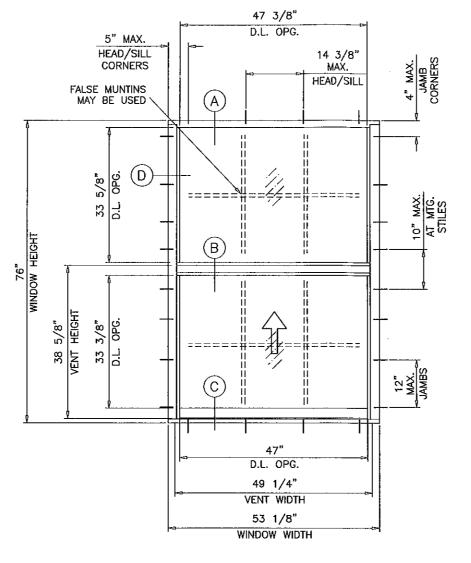
G.4- RECYCLED CON	ENT/BIO-BA	SED MATERIAL/	RAPIDLY RENEWA	BLE MATERIAL
Component Name	% Recycled Content at Manuf.	% Recycled at Disposal	<u>% Bio-based</u> <u>Material</u>	% Renewable Material
1. Window Aluminum	30%	100%	N/A	N/A

22072002	Gi8+ UUPAGTOR (THERMAL/TRANSMITTANGE) BEU/HR-FT/3 F Gi9+SHGC-faction: (Solar Heat Gain: Coekeigient) (btt/hr-ft/2								
V	l'Wishbi	Light	TRANSMITTANCE AT NORMAL INCIDENCE						
()	k-Conde	NS/AVIII(0)	n Resistance						
ID #		Product Number	Window Components:	G.8: U-Factor	G.9: SHGC	VT	CR		
	Base line Product	000	AL_3/16_BRNZ_240#2_SS-D_ARG_BRNZ-1/8_090 PVB_1/8_AL	0.64	N/A	N/A	N/A		
1		001	AL_5/32_BRNZ_240#2_SS-D_ARG_BRNZ-1/8_090 PVB_1/8_AL	0.64	0.21	0.21	15		
2	NCTL 110-	002	AL_5/32_CLR_240#2_SS-D_ARG_CLR-1/8_090 PVB_1/8_AL	0.64	0.22	0.29	15		
3	12453-1	003	AL_5/32_CLR_240#2_SS-D_ARG_GRN-1/8_090 PVB_1/8_AL	0.64	0.21	0.20	15		
4		004	AL_5/32_CLR_240#2_SS-D_ARG_GRY-1/8_090 PVB_1/8_AL	0.64	0.21	0.27	15		

Legend			
Abbreviation:	Description:		
SS-D	Desiccant-Filled Stainless Steel Spacer		
240#2	Cardinal Low E 240 @ #2 Surface Typical		
ARG	90% Argon		
PVB	.090" Poly Vinyl Butyral (PVB) interlayer		
CLR	Clear Glass		
BRNZ	Bronze Tint Glass		
GRN	Green Tint Glass		
GRY	Gray Tint Glass		
AL Aluminum Frame			

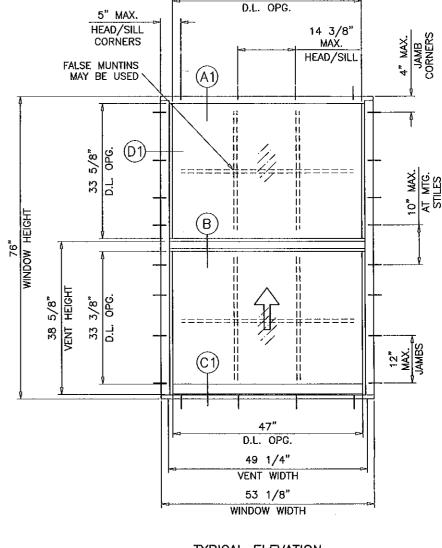
Actionaxion and the second	HITTORYMANE (SONDUCDANGE) BOU/HR4ET 4 P
Component Name	C-Value	
1. Whole Window	1.72	

Carlos M. Utrera P.E. Product Control Examine NOA No. 11-0922:07



TYPICAL ELEVATION

FLANGE FRAME WINDOWS



47 3/8"

TYPICAL ELEVATION

FLUSH FRAME WINDOWS

SH100 ALUMINUM SINGLE HUNG WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER CHART SHOWN ON SHEET 2.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF S.H./S.H. OR SINGLE HUNG WITH OTHER WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING MIAMI-DADE COUNTY APPROVED MULLIONS IN BETWEEN. LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE 2010 EDITION INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

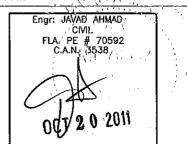
ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, ANCHORS EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2010 FLORIDA BLDG. CODE SECTION 2003.8.4.

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT. SHUTTERS ARE NOT REQUIRED.



date: 03-09-04
[Scale: 1/2"=1'-0"]
[dr. by: HAMID]

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ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 331.74

N.

. ALUMINUM INDUSTRIES I 5 N.W. 75 TH AVE. 11, FL. 33122 (305) 592–1515 FAX. (305) 597–7

R.C. 2805 MIAMI,

ALUM SINGLE HUNG WINDOW (L.M.I.)

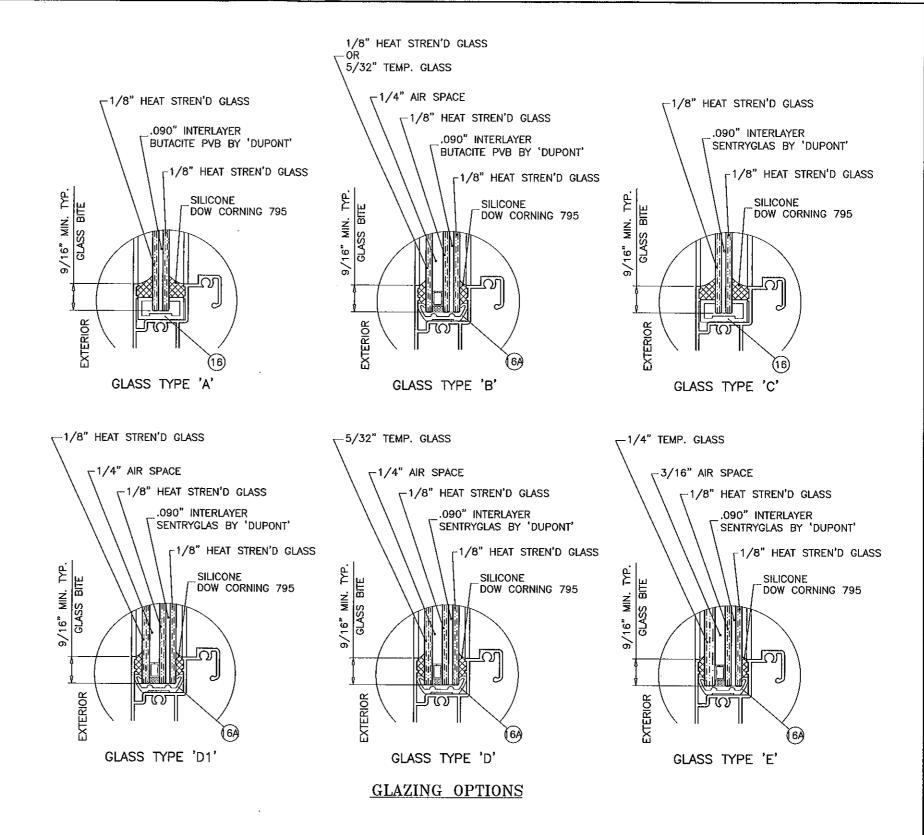
drawing no.

sheet 1 of 6

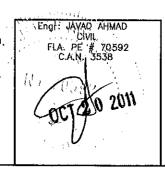
	DESIGN LOAD CAPACITY - PSF						
WINDO	w nine	GLASS	TYPES & 'D1'	GLASS TYPES		GLASS TYPE	
WIDTH	WINDOW DIMS. WIDTH HEIGHT		1NT.(-)	'C' & 'D' EXT.(+) 1NT.(-)		'E' EXT.(+) 1NT.(-	
19-1/8"	110711	EXT.(+) 80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"		80.0	80.0	80.0	140.0	80.0	140.0
37"	26"	80.0	80.0	80.0	140.0	80.0	140.0
48"	(4)	80.0	80.0	80.0	140.0	80.0	140.0
53-1/8"		80.0	80.0	80.0	140.0	80.0	140.0
19-1/8"		80.0	80,0	80.0	140.0	80.0	140.0
26-1/2"		80.0	80.0	80.0	140.0	80.0	140.0
37"	38-3/8"	80.0	80.0	80.0	140.0	80.0	140.0
48"	(4)	80.0	80.0	80.0	133.6	80.0	 -
53~1/8"		80.0	80.0	80.0	116.2	80.0	140.0
19-1/8"		80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"		80.0	80.0	80.0	140.0	80.0	
37"	50-5/8"	80.0	80.0	80.0	140.0	80.0	140.0
48"	(6)	80.0	80.0	80.0	111.2	80.0	140.0
53-1/8"		80.0	80.0	80.0	95.5	80.0	140.0
19-1/8"		80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"		80.0	80.0	80.0	140.0	80.0	140.0
37"	58"	80.0	80.0	80.0	140.0	80.0	140.0
48"	(6)	80.0	80.0	80,0	103.2	80.0	140.0
53-1/8"		80.0	80.0	80.0	87.8	80.0	140.0
19-1/8"		80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"		80.0	80.0	80.0	140,0	80.0	140.0
37"	63"	80.0	80.0	80.0	140.0	80.0	140.0
48"	(8)	80.0	80.0	80.0	99.3	80.0	140.0
53-1/8"		80.0	80.0	80.0	80.0	80.0	140.0
19-1/8"		80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"		80.0	80.0	80.0	140.0	80.0	140.0
37"	74-1/4"	80.0	80.0	80.0	140.0	80.0	140.0
48"	(8)	80.0	80.0	80.0	80.0	-	
53-1/8"		80.0	80.0	80.0	80.0		
19-1/8"		80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"		80.0	80.0	80.0	140.0	80.0	140.0
37"	76" (8)	80.0	80.0	80.0	140.0	80.0	140.0
48"		80.0	80.0	80.0	80.0	-	_
53-1/8"		0.08	80.0	80.0	0.08		
19-1/8"	7	80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"	78" (8)	80.0	80.0	80.0	140.0	80.0	140.0
37"		80.0	80.0	0.08	140.0	80.0	140.0
48"		80.0	80.0	80.0	80.0	1	
19-1/8"	84"	80.0	80.0	80.0	140.0	80.0	140.0
26-1/2"	(10)	80.0	80.0	80.0	140.0	80.0	140.0
37"	,	80.0	80.0	80.0	140.0	80.0	140.0

^{*} NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB.

NOTE: GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300-04 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05-DEC-219

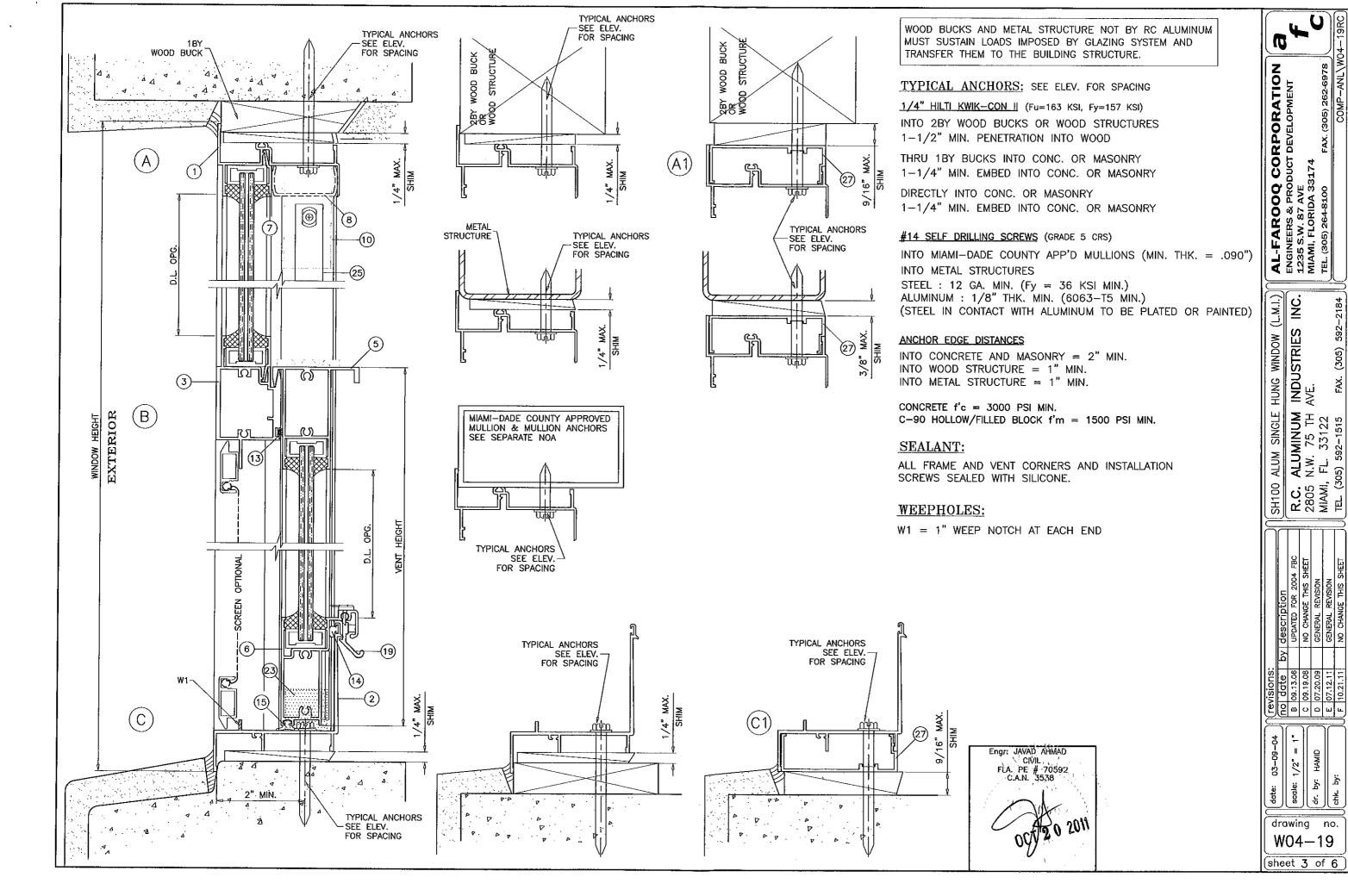


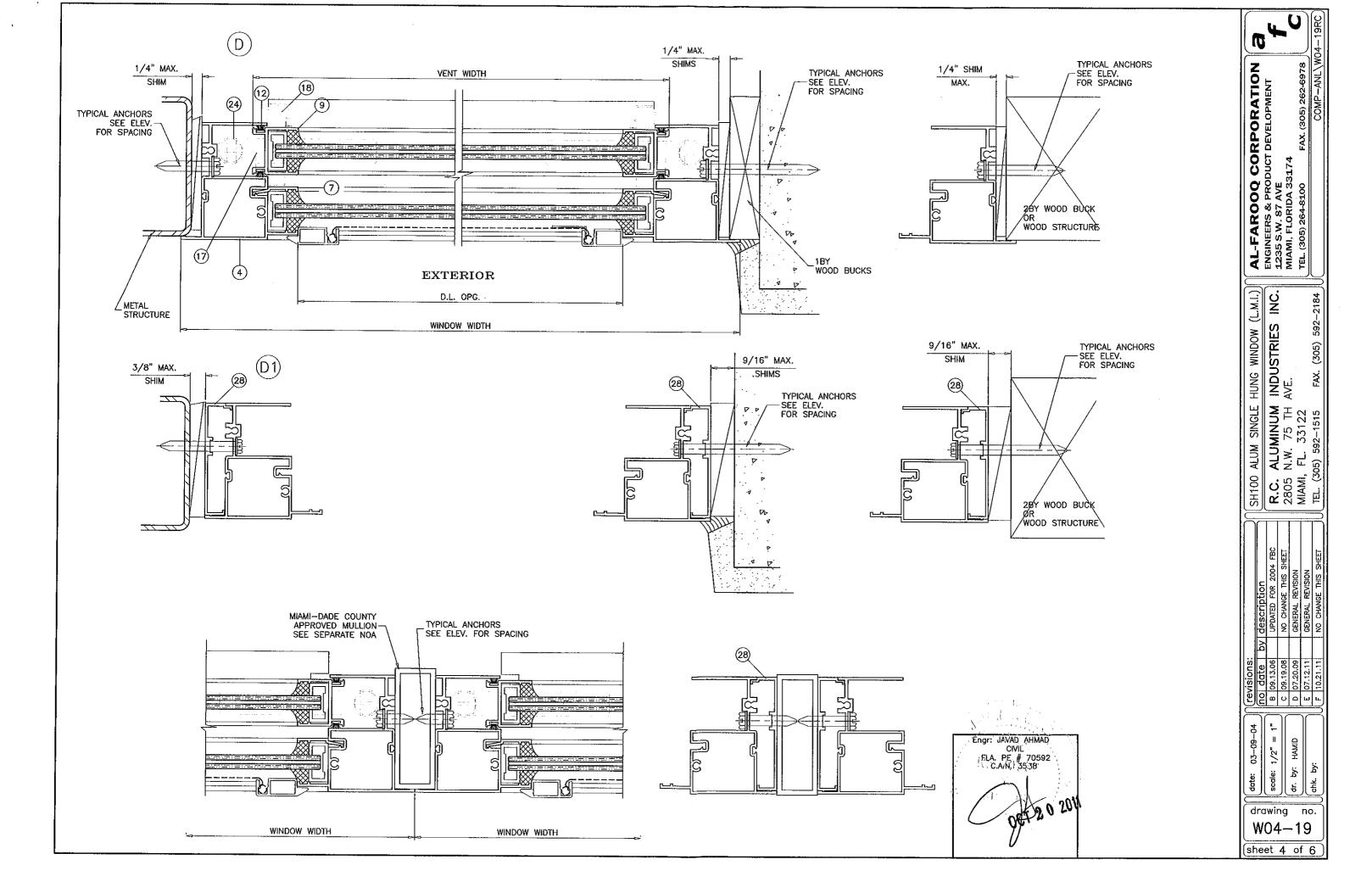
NOTE:
IN ORDER TO QUALIFY FOR SMALL MISSILE IMPACT RATING
EXTERIOR PLY OF GLASS TYPE 'B', 'D', 'D1' & 'E' MUST BE TEMPERED.

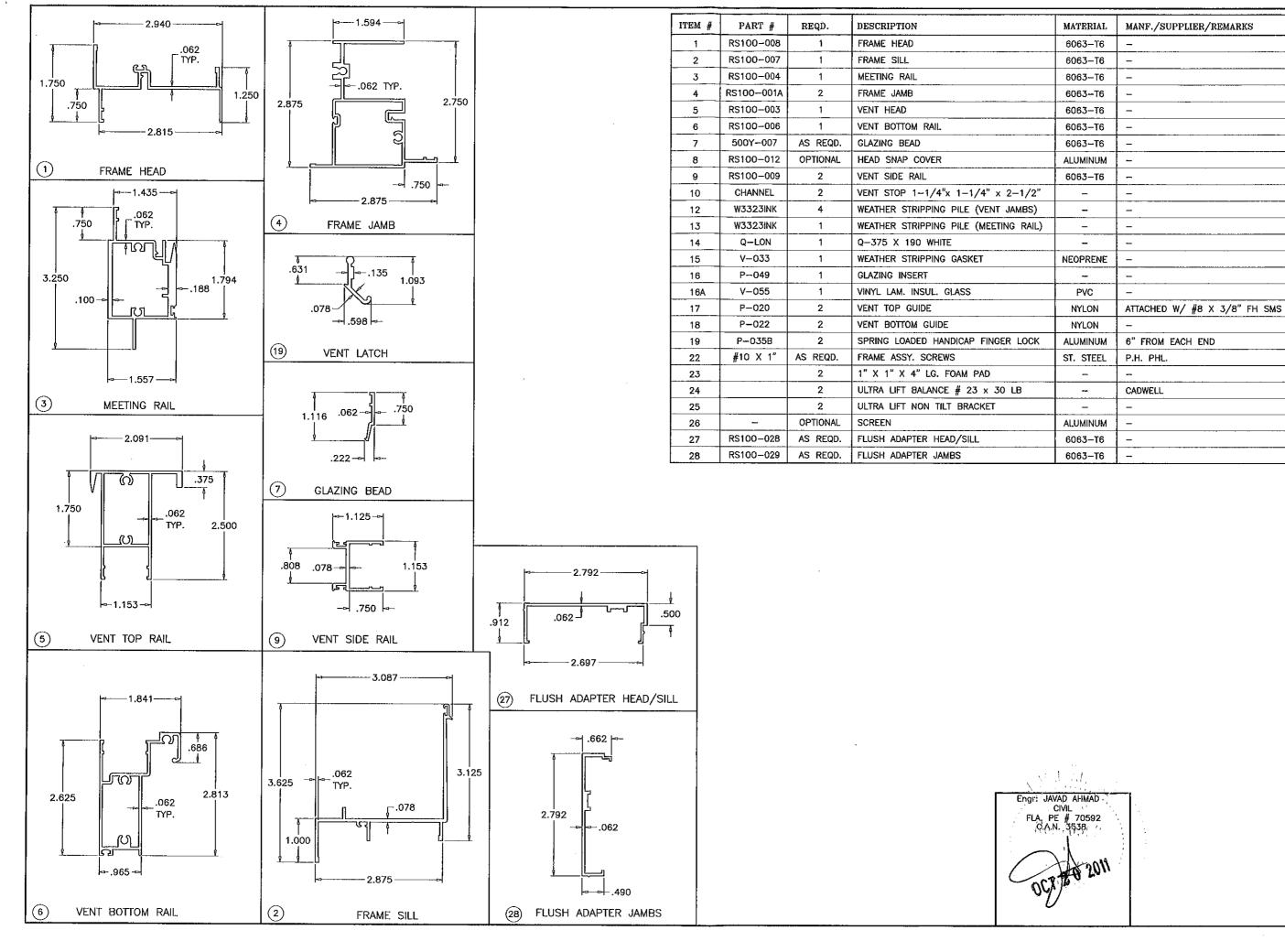


(L.M.I.) S S S INDUSTRIES
AVE. WINDOW HUNG **ALUMINUM**N.W. 75 TH A
FL. 33122 SH100 ALUM SINGLE R.C. 2805 MIAMI, TEL. (30 1/2"=1'-0" HAMID 03-09 drawing no. W04-19 sheet 2 of 6

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U AL-FAROOQ CORPORATION
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SH100 ALUM SINGLE H

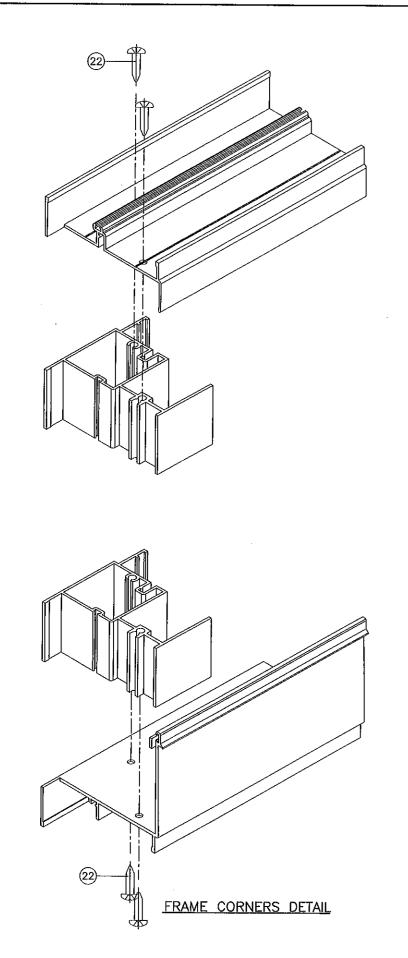
R.C. ALUMINUM I
2805 N.W. 75 TH A
MIAMI, FL. 33122
TEL (305) 592-1515

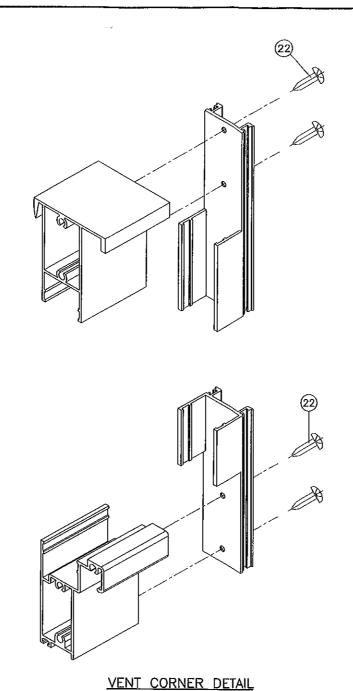
revisions:
no date
B 09.13.06
C 09.19.08
D 07.20.09
E 07.12.11

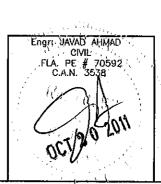
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drawing no. W04 - 19

sheet 5 of 6







SH100 ALUM SINGLE HUNG WINDOW (L.M.I.)

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drawing no. W04-19

sheet 6 of 6